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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,123

07/01/2002

Keith Roscoe

P67675USO

.7185

136 7590 04/24/2007

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EXAMINER

CARRILLO, BIBI SHARIDAN

ART UNIT

PAPER NUMBER

1746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/069,123

Applicant(s)

ROSCOE, KEITH

Examiner

Sharidan Carrillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 24 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations of the flowable liquid material in the form of a slug constitutes new matter, not supported by the specification as originally filed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6, 8, 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 26 are indefinite because it is unclear what is meant by "used for conveying flowable liquid material of the flowable liquid material conveyed in said pipes". Claim 2 is indefinite because it is not further limiting. Claim 2 depends upon claim 1, however claim 1 recites forcing at a second velocity. Claim 25 is indefinite

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because it is unclear whether "forcing of the gas" refers to the first step, the second step, or both.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-4, 6, 8, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCune (3139704).

McCune teaches cleaning pipes by preliminarily flushing the pipe with gas under pressure using an air compressor 98, followed by blasting with sand and air at a velocity of not less than 3000ft/min, followed by washing with a treating fluid (col. 2, lines 30-57). In col. 7, lines 20-25, McCune teaches that the initial inlet velocities during the sand blasting step are high, while the initial pressure is low. Re claim 1, McCune a first

velocity of 2300ft/min at a pressure of 60.5psia and a V2 velocity of 12600ft/minute, wherein the pressure P2 would be lower based on Boyle's Law, $P_1V_1=P_2V_2$.

Re claims 1, 24 and 26, McCune does not specifically teach the pipe being filled with a flowable liquid material, the flowable liquid material being in the form of a slug, and discharging the flowable liquid material by purging with a gas. However, McCune teaches cleaning the internal surfaces of pipelines to remove deposits therefrom. In col. 9, lines 25-35, McCune teaches that the pipeline is filled with debris, obstruction and fluid. Therefore, McCune teaches that the pipeline is filled with flowable fluid.

Tolia et al. teach a method of removing processing liquid from a delivery line by flushing with a purge gas which dislodges liquid particles (col. 2, lines 50-60, col. 5, lines 10-25). The teachings of liquid particles read on applicant's claim of a liquid material in the form of a slug. Tolia et al. is relied upon to teach that it is well known in the art to purge flowable liquid material (i.e. slugs (liquid and particles)) from piping by flushing with a purge gas. Since McCune teaches cleaning the interior of the pipeline to remove deposits by purging with a gas, and further teaches that the pipeline includes fluid, one would reasonably expect the method of McCune to also remove liquid, particles and debris present in the interior of the pipe since Tolia et al. teach that purging with a gas also removes liquid particles present in the piping.

In reference to claim 2, McCune teaches an air compressor. In reference to claims 3- 4, refer to col. 9, lines 64-65. In reference to claim 6, refer to Fig. 1. In reference to claim 8, 20m/s is equivalent to 3937 ft/min. Col. 2, lines 53-55 teaches a

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velocity of not less than 3000ft/min. Re claim 25, Tolia et al. teach it is well known to purge liquid particles from a piping using a purging gas only.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCune (3139704) in view of Tolia et al. (6305392), as applied to claims 1-4, 6, 8, and 24-26, as applied to paragraph 6 above, and further in view of Muta (4216738).

McCune teaches the invention substantially as claimed with the exception of flushing the pipe with gas after applying the cleaning fluid. Muta teaches cleaning the pipe. In col. 7, lines 40-65, Muta teaches flushing the pipe with water followed by flushing with air in order to fully evaporate the water and moisture adhering to the inner wall of the pipe, thereby drying the pipe. It would have been obvious to a person of ordinary skill in the art to have modified the method of McCune to include flushing with air after the cleaning fluid, as taught by McCune, for purposes of drying the pipe.

Response to Arguments

8. The rejection of the claims, under 112, second paragraph is maintained for the reasons set forth above.

9. The rejection of the claims, as being anticipated by McCune is withdrawn in view of the newly amended claims.

10. The rejection of the claims, as being unpatentable over McCune in view of Muta is maintained for the reasons set forth above.

11. Applicant argues that McCune teaches an essentially empty pipe. Applicant's arguments are unpersuasive since in col. 9, lines 25-30, McCune teaches various

cleaning steps being performed in order to remove debris, obstruction, fluid, scale from the interior of the piping.

12. Applicant argues that McCune fails to teach clearing a pipe of a flowable liquid material. McCune does not specifically teach t the pipe being filled with a flowable liquid material. However, McCune teaches cleaning the internal surfaces of pipelines to remove deposits therefrom. In col. 9, lines 25-35, McCune teaches that the pipeline is filled with debris, obstruction and fluid. Therefore, McCune teaches that the pipeline is filled with flowable fluid material. The limitations of purging flowable liquid material in a pipe by flushing with a purging gas are met by the teachings of Tolia et al., as described above.

13. Applicant further argues that it is not obvious to the skilled artisan to clean out the contents of the pipe by applying a gas at one end of the pipe. Applicant's arguments are unpersuasive in view of the teachings of Tolia et al.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Malmros, Sundholm, and Wright teach cleaning pipes.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on Monday-Friday, 6:00a.m-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo
Primary Examiner
Art Unit 1746

bsc



SHARIDAN CARRILLO
PRIMARY EXAMINER